Work Order ID 62145

Thursday, September 16, 2010 3:46:46 PM



Page 1

Item ID:

D212-664-101

Accept



Setup Start



Revision ID:

Item Name: Crosstube Fwd

Required Date: 9/30/2010

Start Date:

9/16/2010

Start Oty: 1.00

Req'd Qty: 1.00



Cust Item ID:

Customer:

Reference:

Approvals:

Process Plan:

QC:

Date: 10914

Date:

Tooling:

Date: Date:

Start Run

Qty

Stop

Sequence ID/ Work Center ID

Operation Description Set Up/ **Run Hours**

SPC (Y/N):

Tool ID

Tool # Plan Code

Accept Qty

Reject Reject Number

Insp. Stamp

Draw Nbr

Revision Nbr

D212-664-141

Rev D

Document Control

DOCUMENT CONTROL

Memo

0.00

Photocopy bluefile and create labels as per PPP D212-664-101 CHG003

110

100

Packaging

Packaging

Pick Kit

Packaging

Memo

0.00

0.00

120

CNC Bend 2

CNC Alpha 160 Bender

Memo

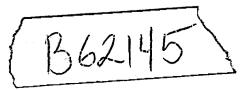
0.00

0.00

Bend tube as per Dwg D212-664-141 using CNC bender program 212-fw and

Folio D212-664-101

BENDING MACHINE - CROSSTUBES



Dart Ae	rospace	e Ltd					. *			
W/O:			WORK ORDER CHANGES							
DATE	STEP	.4.	PROCEDURE CHANGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector		
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	<i>)</i>									
	7							***		
Part No	: <u>.</u>	PAR #	: Fault Category:	NCR: Yes	No DQ	A:	Date:			
Resolution:		esolution:	Disposition: G		losed:		Date: _			
NCR:			WORK ORDER NON-CONFO	ORMANCE (NCI	R) .	* \-				

NCR:		WORK ORDER NON-CONFORMANCE (NCR)							
		Description of NC		Corrective Action Section B		Verification	Ammunici	Ammunical	
DATE	STEP	Section A	Initial Action Description Chief Eng Chief Eng		Sign & Date	Section C	Approval Chief Eng	Approval QC Inspector	
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D212-664-101

Accept



Stop



Revision ID: Item Name:

Crosstube Fwd

Start Date:

9/16/2010

Start Qty: 1.00

Req'd Qty: 1.00



Cust Item ID:

Customer:

Reference:

Approvals:

Required Date: 9/30/2010

Process Plan:

Date:

Tooling:

Date:

Date:

Start Run

Stop



QC:

Date:

SPC (Y/N):

Set Up/

Run Hours

Tool ID

Tool # Plan

Code

Accept Qty

Reject **Qty**

Reject

Insp. Number Stamp

Work Center ID

130

Sequence ID/

Quality Control

Operation Description

QC15- Crosstube Dimensional Check

Memo

0.00

10/08/29

140



Crosstubes

Crosstubes

0.00

Memo

0.00

1-Drill pilot holes in tube as per Dwg D212-664-141 using drill Jig DT8548 & DT8549,using drill table DT8577,set-up towers in hole #7 as per QSI 10

2-Ream hole to finish size in tube as per Dwg D212-664-141using drill Jig DT8548 & DT8549. Check dimensions between holes, both sides on both cuffs. to ensure alignment with saddle holes.

3-Scribe part # and batch # using vibrating stylus as per Dwg D212-664-141

4-Deburr & Inspect for surface damage. Repair damage within limits as per Dwg D212-664-141

- EL 10-10-5

W/O:		WORK ORDER CHANGES										
DATE	STEP	PRO	OCEDURE CHA	NGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval *QC Inspector			
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Part No	•	PAR #:	Fault Cate	egory:	NCR: Yes	No DQA:		_ Date: _				
	Re	esolution:	Disposition	on:	QA: N/C Cld	osed:		_ Date: _				
NCR:			WORK ORD	ER NON-CONFORMA	NCE (NCR)						
DATE	STEP	Description of NC Section A	Initial Chief Eng	Corrective Action Section Action Description Chief Eng	cription Sign &		tion C	Approval Chief Eng	Approval QC inspector			
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Work Order ID 62145

Thursday, September 16, 2010 3:46:46 PM



Page 3

Item ID:

D212-664-101

Accept

Setup Start



Revision ID:

Item Name Start Date:

Required Date: 9/30/2010

Crosstube Fwd

9/16/2010

Start Otv: 1.00

Reg'd Otv: 1.00



Date:

Cust Item ID:

Customer:

Tool ID

Reference:

Approvals:

Process Plan:

Date:

Tooling: SPC (Y/N):

Date: Date:

Run

Reject

Qty

Start Stop

Stop



Number Stamp

Insp.

Reject

Sequence ID/

Work Center ID

150

HandFXtube

Operation Description

Crosstubes Chemical Conversion

Memo

Set Up/ **Run Hours**

0.00

Accept

Qty

Tool # Plan

Code

Hand Finishing Crosstubes

Chemical Conversion Coat within 24 hours of bending and drilling

160

OC

Quality Control

QC5- Inspect part completeness to step on W/O

0.00

0.00

170

Outsource2

Outsource process - NDT

Outsource process - NDT per OSI038 4.1

0.00

Memo

Memo

0.00

Liquid Penetrant Inspection as per QSI 038

Issue P/O: 12703 LPI as per ASTM 1417 Level 2

Attach copy of NDT results to work order

CX 10/10/06 0

W/O:		WORK ORDER CHANGES										
DATE	STEP	PR	OCEDURE CH		Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector			
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Part No		PAR #:										
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DATE	STEP	Description of NC	Initial	Corrective Action Sec Action Description	etion B		cation	Approval	Approval			
		Section A	Chief Eng	Chief Eng	Date		ion C	Chief Eng	QC Inspector			
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Work Order ID 62145



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Item ID:

Thursday, September 16, 2010 3:46:46 PM

Accept



Setup Start

Stop



Revision ID:

Start Date:

Item Name:

Required Date: 9/30/2010

Crosstube Fwd

D212-664-101

9/16/2010

Start Oty: 1.00

Req'd Oty: 1.00

Cust Item ID:

Customer:

Reference:

Approvals:

Process Plan:

QC:

Date:

Tooling:

Run Hours

SPC (Y/N):

Date: Date:

Start



Run

Stop

Sequence ID/ **Work Center ID**

180

Packaging

Packaging

Operation Description

Receive & Inspect for Damage & Mat'l Certs

Packaging

0.00

0.00

Ensure copy of NDT results attached to work order.

Date:

Tool ID Set Up/

Tool # Plan

Accept Qty Code

Reject Otv

Reject Number Stamp

Insp.

190

QC5- Inspect part completeness to step on W/O

0.00



Quality Control

Memo

0.00

Inspect for damage & ensure results are as per Dwg D212-664-141

10 10 06 (1)

W/O:		WORK ORDER CHANGES										
DATE	STEP	PRO	OCEDURE CH	ANGE	Ву	Date Qty	Approval Chief Eng /	Approval QC Inspector				
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Thursday, September 16, 2010 3:46:46 PM

Item ID:

D212-664-101

Accept

Setup Start



Revision ID:

Item Name: Crosstube Fwd

Required Date: 9/30/2010

9/16/2010

Start Otv: 1.00

Req'd Oty: 1.00



Cust Item ID:

Customer:

Tool ID

Reference:

Start Date:

Approvals:

Process Plan:

OC:

Date:

SPC (Y/N):

Set Up/

Run Hours

Tooling:

Date: Date:

Tool # Plan

Code

Start

Reject

Qty

Run

Accept

Otv



Stop

Reject

Stop

Number Stamp

Insp.

Sequence ID/ Work Center ID

200

SprayPaint Spray Painting

Operation Description

Spray Painting per QSI005 4.2

SprayPaint

Date:

Memo

0.00

0.00

1-Prime inside and outside crosstube as per QSI 005 4.2 2-Paint outside crosstube with White Imron as per OSI 005 4.2

Start Time: 930 PRIME: Fininsh Time: 10:30

PAINT:

Start Time: 3:00 Finish Time: 4330

210

QC14- Inspect Spray Paint

0.00



Memo

0.00

Quality Control

Then. Wrap in plastic bag to protect from scratches

ET 10-10-87

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W/O:			GES				,		
DATE	STEP	PRO	OCEDURE CH	ANGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
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Part No		PAR #:	Fault Ca	tegory:	NCR: Yes	No DQ	A:	Date: _	
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NCR:			WORK OR	DER NON-CONFORM	IANCE (NCI	7)			
DATE	STEP	Description of NC		Corrective Action Se	Verifi	cation	Approval	Approval	
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Work Order ID 62145

Page 6

Insp.

Thursday, September 16, 2010 3:46:46 PM Item ID: D212-664-101 Accept Setup Start Revision ID: Stop Item Name: Crosstube Fwd Start Otv: 1.00 Start Date: 9/16/2010 Cust Item ID: **Required Date: 9/30/2010** Rea'd Otv: 1.00 Customer: Reference: Start Run Process Plan: Date: Approvals: Tooling: Date: Stop Date: SPC (Y/N): Date: Sequence ID/ **Operation** Set Up/ Tool ID Tool # Plan Accept Reject Reject Work Center ID Otv Oty Description Code Number Stamp **Run Hours** 220 0.00 Crosstubes Crosstubes 0.00 Memo Crosstubes 1- Lightly scuff the bonded area using a 320 grit sand paper and clean the area with 41058 wash 'n' wine 2-Install supports with magnobond as per QSI 015 Adhere for for 12 Hrs A/R 6398 Magnobond Batch: 114156 PXP:01 2011 Torque'M boliolos 230 QC5- Inspect part completeness to step on W/O Memo Quality Control 240 Pick Kit 0.00

Packaging Packaging

Memo

0.00

/0 141413 (1)

Dart Ae	rospace	Ltd								;
W/O:			W	ORK ORDER CHAN	NGES					, r *
DATE	STEP	PRO	OCEDURE CH	NGE		Ву	Date	Qty	Approval Chief Eng / Prod Mgr.	Approval QC Inspector
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Part No	Part No: PAR #:			egory:	NCR	: Yes N	_ Date: _			
	Resolution:			on:	QA:	N/C Clo	sed:		Date: _	
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DATE	STEP	Section A	Initial Chief Eng	Action Descriptio		Sign & Date	1	ion C	Chief Eng	QC Inspector

Work Order ID 62145



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Item ID:

Accept

Setup Start



Revision ID:

Item Name:

Required Date: 9/30/2010

Crosstube Fwd

D212-664-101

9/16/2010

Thursday, September 16, 2010 3:46:46 PM

Start Otv: 1.00

Reg'd Otv: 1.00

Cust Item ID:

Customer:

Reference:

Start Date:

Approvals:

Process Plan:

OC:

Date:

Date: Tooling:

SPC (Y/N):

Date:

Start

Stop



Stop

Sequence ID/

Work Center ID

250

Quality Control

Operation Description

OC4-100% Inspect kits for completeness

Memo

Set Up/ **Run Hours**

8 10/10/13

Tool ID

Tool # Plan Code

Reject Accept Oty Oty

Run

Reject Number

Insp. Stamp

260

Packaging

Packaging

Packaging

Memo

0.00

0.00

Identify and pack for shipping as per PPP D212-664-101

RUR

270

Quality Control

OC21- Final Inspection - Work Order Release

0.00

Memo

0.00

10/10/13 A) 10/10/13 A) NF 10-13

W/O:			VV	ORK ORDER CE	IANGES					4 4 *
DATE	STEP	PRO	OCEDURE CH	ANGE		Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
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Part No	•	PAR #:	Fault Cat	egory:	NC	R: Yes	_ Date: _			
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DATE	STEP	Description of NC	Initial	Corrective Action	Section B	Sign &	Verific	ation	Approval	Approval
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Picklist Print

Thursday, September 16, 2010 3:47:28 PM

Work Order ID: 62145

Parent Item:

D212-664-101

Parent Item Name: Crosstube Fwd



Start Date: 9/16/2010

Required Date: 9/30/2010

Start Qty: 1.00

Required Qty: 1.00

Comments:

IPP Rev:E□04.02.16□Reformat□KJ/DS

IPP Rev:F 06-03-29 Remove Coments on Pick List JLM

IDD David 07 04 30

	PP Rev:G 07-04-	30 As per Rev	C		JLM								
Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D212-664-101TRN Crosstube Turning Detail	HAN 1888 HOW DAYS HAN	Manufactured	No			110	Each	2.0000		1 C B68	2134		
Orossidoo Turring Detail				Location	<u>n</u>	Loc	<u>Oty</u>	Loc Code			\mathcal{N}		a. a
				LG	•		2		_			10	-9-20
					61854		1				_ ' `		•
					61855		1						
D3595-063-450		Manufactured	No			230	Each	123.6590	4	4.21052	6	1	
RUBBER CUSHION										,	/	W/ 10	0-01-0
			*	<u>Location</u>	<u>n</u>	Loc	<u>Qty</u>	Loc Code					
				LG		123.658	9737		_		_		
					53775	5.9789	7368						

Location	Loc Qty	Loc Code	
LG	123.6589737		
53775	5.97897368		
58161	3.56		
59580	10.12		
60983	25		
61465	79		

W/O:			WORK ORDER CHANGES								
DATE	STEP	PRO	OCEDURE CH	IANGE		Ву	Date Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector		
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Part No	:	PAR #:	Fault Ca	tegory:	NC	R: Yes N	No DQA:	Date: _			
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NCR:		WORK OR	DER NON-CONF	ORMANCE	(NCR))					
DATE	STEP	Description of NC Section A		Section B	0:	Verification	1 Approval	Approval			
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Thursday, September 16, 2010 3:47:28 PM

Work Order ID: 62145 Parent Item: D212-664-101 Parent Item Name: Crosstube Fwd **Required Date: 9/30/2010** Start Date: 9/16/2010 Start Oty: 1.00 Required Oty: 1.00 MS21920-25 Purchased No 220 Each 79.0000 Clamp(per MIL-DTL-8783C) Location Loc Otv Loc Code LG 55 113281 0 114759 5 114901 25 115278 25 ST451 24 113281 5 113282 18 113744 D2893-1 27.0000 Manufactured No 220 Each M 10.10.07 2.75 Support Location Loc Qty Loc Code LG 27 8 19 D3428-1 No 240 Each 0.0000 Manufactured ر ود ر Placard AN6-35A No 240 Each 31.0000 Purchased **BOLT** Loc Oty Location Loc Code ST343 31 115204 31

W/O:		WORK ORDER CHANGES										
DATE	STEP	PRO	PROCEDURE CHANGE By					Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector		
									r rod Mgr			
Part No	:	PAR #:	Fault Cate	gory:	NCR: Y	es N	o DQ	\ :	_ Date:			
Resolution:			Disposition	n:	_ QA: N/0	QA: N/C Closed: [_ Date:		
NCR:			WORK ORD	ER NON-CONFORMA	ANCE (N	ICR)			**************************************			
DATE	STED	Description of NC	Corrective Action Section B				Verification	ation	Approval	Approval		
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Thursday, September 16, 2010 3:47:28 PM

Work Order ID: 62145

Parent Item:

D212-664-101

Parent Item Name:

Crosstube Fwd



Start Date: 9/16/2010

Required Date: 9/30/2010

Start Qty: 1.00

Required Qty: 1.00

No

Location

Location

ST300

ST343

Each 40.0000

Bolt

AN6-36A

Purchased

Purchased

No

Loc Qty 40 40 115016

240

240

Loc Qty

268

4

64

200

Each 268.0000

Loc Code

15016

No

111578 114495 115300 240

Loc Code Each 0.0000

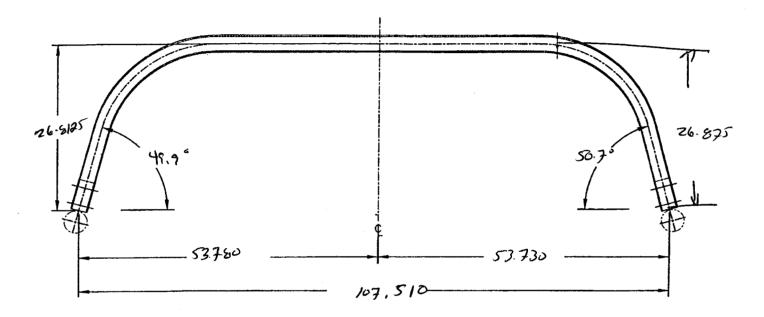
NAS1149D0663J Purchased

Washer

N/O:			WORK ORDER CHANGES								
DATE	STEP	PRO	PROCEDURE CHANGE By Date Qty Chief Eng / Prod Mgr					Approval Chief Eng / Prod Mar	Approval QC Inspector		
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DART AEROSPACE LTD	Work Order:	62143
Description: Crosstube High Fwd (205/212/412)	Part Number:	D212-664-101
Inspection Dwg: D212-664-141 Rev: D		Page 1 of 1

Required Dimension	Min	Max
Height	26.79	27.05
1/2 Span	53.59	53.85
Angle	49	52
Total Span	107.18	107.7



	Comments	

QC15 Inspection Date	18.	

Rev	Date	Change	Revised by	Approved
A	07.02.06	New Issue	KJ/JM	
В	07.05.31	Dimensions updated per Dwg Rev C	KJ/JM , A	
С	10.04.01	Dwg Rev updated	KJ SA	1
L				

Dart Ae	rospace	Ltd
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W/O:	W/O:			ORK ORDER CHANG	ES				
DATE	STEP	PROCEDURE CHANGE				Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
Part No	<u>.</u>	: PAR #:	Fault Cate	adory.	NCR: Yes	No DQA	•	Date:	
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NCR:			WORK ORD	ER NON-CONFORMA	NCE (NCF	R)		, · · · · ·	
DATE	STEP	STEP Description of NC	In this at	Corrective Action Section		Verifica		Approval	Approval
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Item	Qty -141	Qty -141B	Part Number	Description
1	Х		D212-664-141	CROSSTUBE ASSEMBLY (205/212/412 HIGH FWD)
2		Х	D212-664-141B	CROSSTUBE ASSEMBLY (214 HIGH FWD)
3	1	1	D6005-128	CROSSTUBE
4	2	2	D2893-1	SUPPORT
5	4	4	D3595-063-450	RUBBER CUSHION
6	4	4	MS21920-25	CLAMP (OR MS21920-26)
7	A/R	A/R	MAGNOBOND 6398	ROCKWELL SPECIFICATION RBO-120-023 ADHESIVE (TEXTRON/BELL SPEC. 299-947-100, TYPE II, CLASS 2 ADHESIVE)

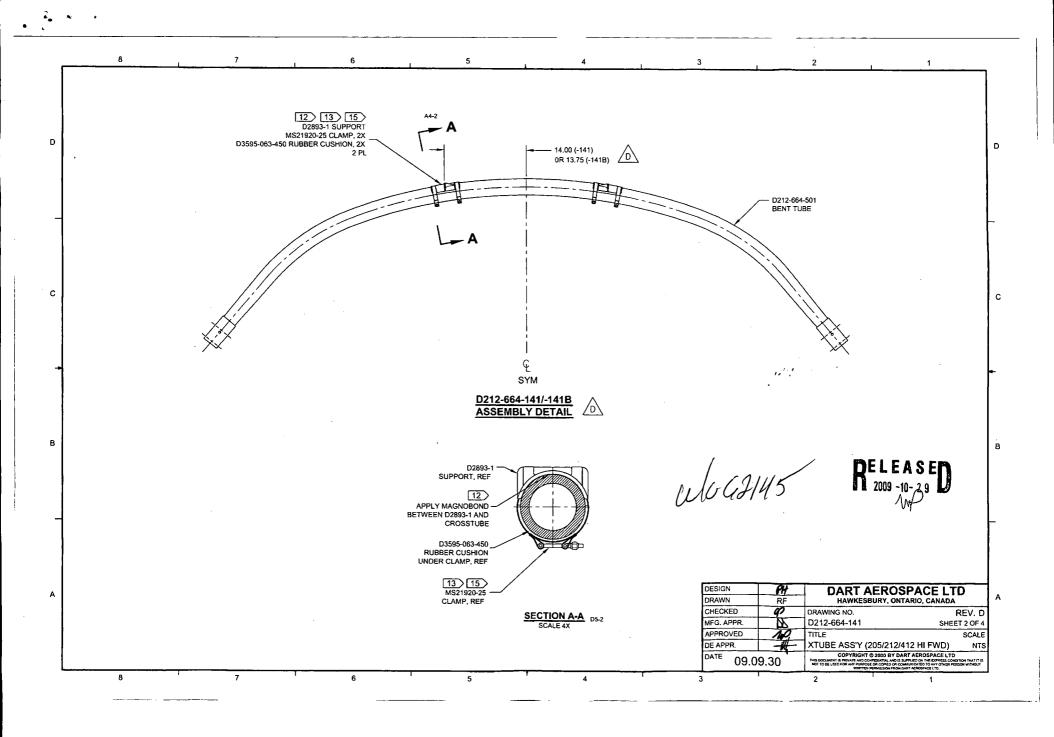
GENERAL NOTES:

- 1) MATERIAL: MANUFACTURED FROM D6005-128 FINISHED LENGTH = 126.514±0.020
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1 PRIME INSIDE AND OUTSIDE PER DART QSI 005 4.2
- PAINT OUTSIDE PER DART QSI 005 4.2 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- UNITS: INCHES UNLESS OTHERWISE NOTED.
- BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- IDENTIFICATION: SCRIBE DART PART NUMBER "D212-664-XXX" AND BATCH NUMBER ON INSIDE OF CUFF USING VIBRATING STYLUS
- 7) WEIGHT: D212-664-141 = 33.6 lbs (PER IIN-D212-664) D212-664-141B = 33.6 lbs (PER IIN-D212-664)
- 8) PART IS SYMMETRIC ABOUT CENTERLINE.
- 9) RUN CUTTER OFF PART. BLEND OUT EDGE LONGITUDINALY, TRANSITION SHOULD BE SMOOTH.
- 10) BEND PROGRESSIVELY WITH A MINIMUM OF 3 PASSES. MAXIMUM TUBE FLATTENING DUE TO BENDING IS 6% BASED ON O.D.
- 11) LIQUID PENETRANT INSPECT OUTSIDE SURFACE OF CROSSTUBE PER QSI 038.
- 12) INSTALL D2893-1 SUPPORT USING 0.03" TO 0.06" THICK LAYER OF MAGNOBOND 6398 TO THE SURFACE OF D2893-1 THAT WILL BE IN CONTACT WITH THE CROSSTUBE PER QSI 015. LET CURE FOR 12 HOURS AFTER INSTALLATION AND PRIOR TO PACKAGING.
- 13) INSTALL MS21920-25 CLAMPS (OR -26) WITH D3595-063-450 RUBBER CUSHIONS TO SECURE THE D2893-1 SUPPORT ON TOP SIDE OF THE CROSSTUBE. ENSURE CLAMPS ARE OPPOSITE OF CROSSTUBE
- 14) EXTREME CARE MUST BE TAKEN TO PROTECT THE OUTSIDE SURFACE OF THE TUBE. THE OUTSIDE SURFACE MUST BE SMOOTH AND FREE FROM SURFACE DEFECTS SUCH AS SCRATCHES, NICKS, OR DENTS. DEFECTS UP TO 0.005" MAY BE BLENDED OUT LONGITUDINALLY. CIRCUMFERENTIAL GRIND MARKS ARE UNACCEPTABLE.
- 15) TORQUE CLAMPS 80 TO 100 IN-LB. ENSURE AT LEAST 1.5 THREADS SHOWING IN SAFETY AND THAT NUT HAS NOT BOTTOMED-OUT AFTER TORQUING.

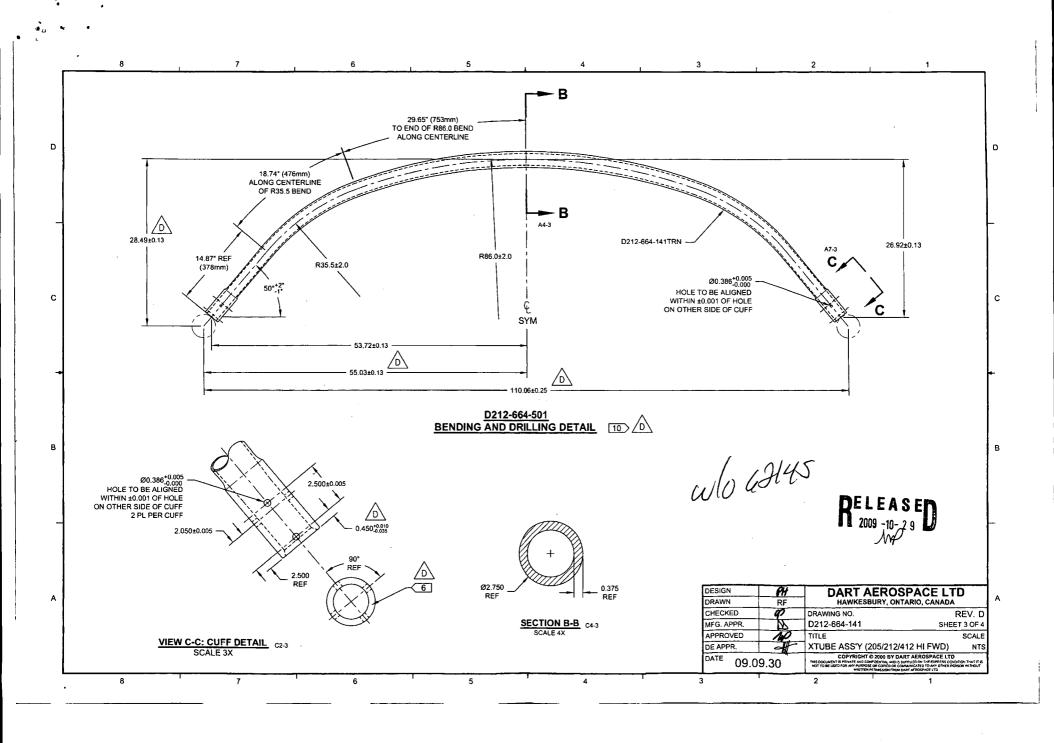
SHOW UNCONTROL S CONV WITHO * She i WOKE 145 NO 62145 Plu 914

D	REORG. TO CUR REMOV & B6-3);	MAT/REVISE G ANIZED VIEWS RENT STANDA ED REF & ADD RELOCATED TURNING DET	RF	09.09.30			
С			SION STRIP; ADD MAGNOBOND /ERSE CLAMPS	PH	07.03.08		
В	ADD H	OLES FOR CO JBES	PH	05.02.04			
Α	NEW IS	SUE		PH	00.12.12		
REV.			ESCRIPTION	BY	DATE		
DESIGN		PH	DART AEROSP	ACE	LTD		
DRAWN		RF	HAWKESBURY, ONTAR	IO, CAN	ADA		
CHECKE	O	P	DRAWING NO.		REV. D		
MFG. AF	PR.	N.	D212-664-141 SHEET 1 OF				
APPRO\	/ED	10	TITLE		SCALE		
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DE APPR. XTUBE ASS'Y (205/212/412 HI FWD) N' DATE 09.09.30 XTUBE ASS'Y (205/212/412 HI FWD) N' 1000 COPYRIGHT © 2000 BY DART AFROSPACELTD 1000 COPYRIGHT © 2000 BY DART AFROSPACELTD 1001 TO BE USED FIRST ANY PARPOSE OF COMPANDE N' TO AFROSPACE N' TO N' TO BE USED FIRST ANY PARPOSE OF COMPANDENTE TO AFROSPACE N' WHITE AFROSPACE N' TO BE USED FIRST ANY PARPOSE OF COMPANDENTE TO BE USED FIRST ANY PARPOSE OF COMPANDENTE TO							

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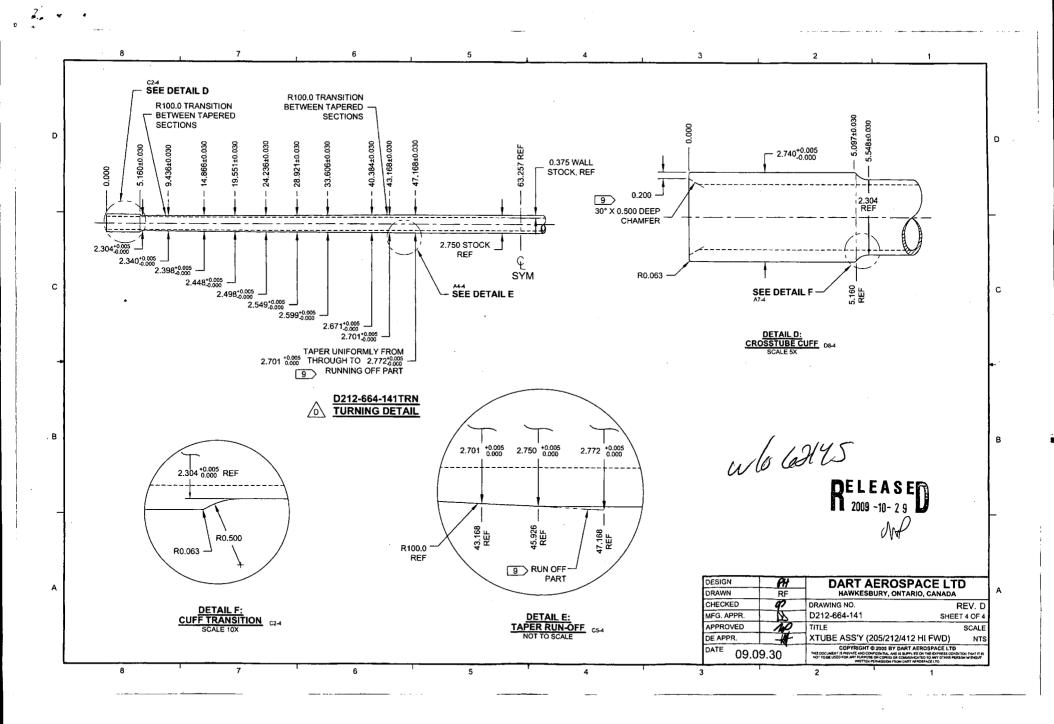


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	В	Resolution:		Disposition:	OA: N/C	Closed:		Date:	

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, p ²		Description of NC	Corrective Action Section B			Verification	A(21)	Annroyal
DATE	STEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section C	Approváľ Chief Eng	Approval QC Inspector
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LIQUID PENETRANT TEST REPORT

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ACUREN		*
	1 0	PAGE / OF !
CLIENT DA	11 AE205/A/E DATE	601-6-2010 TIME AM 1 PM 1
ATTENTION L	-INDA/CHANTEL ACUREN.	00
ADDRESS / 2	DO ABELDIEW ST. POWON	
40 ·	KES BAY ON WORKLON	11000000
1/400	K6A IK7 ACCEPTAN	
PROJECT	FPT O.	CROSS TUBES
ITEM(S) EXAMINED		
TIEM(3) EXAMINED		
JOB DESCRIPTION	PROCEDURE NO. LT-0002 REV./DATE	TECHNIQUE NO. LT-GAH 2 REV./DATE
Part No.	MATERIAL	ALLOWE ALLOWINGE THICKNESS
Scope $WE7$	FLOURES CENT PENET	PANT INSPECTION CARRIED
OU	TON 100% EXTERNAL	SURFACE
TEST DETAILS		
	¥FLUORESCENT ☐ VISIBLE ¥WATER	
FAMILY BRAND UAS	3 / 1	SHT S/N 16459 OUTPUT > 1000 µW/CM2 AMBIENT < 2 fc EQUIP. FLASHLIGHT TROUBLELIGHT OUTPUT>100 fc SURFACE
PENETRANT REMOVER H.	45 MINIMUM DWELL TIME 45 10 MIN. LIGHTING MINIMUM DRY TIME >10 MIN. OTHER	LAGINO
(1)	MINIMUM DWELL TIME 10 MIN. LIGHT ME	TERS/N 1098866 CAL DUE DATE OCT-19
	ION AQUEOUS DAQUEOUS DRY	2010
TEST SURFACE	AS GROUND	NED ☐ SHOT BLASTED ☐ CLEAN BARE METAL
SURFACE CONDITION A		☑ 10°C/50°F TO 52°C/125°F □ > 52°C/125°F
RESULTS- (D)	METRIC (METRICAL)	
1 - Closs Tube	-W.O. 61069	
1- CECSITUBE	W.O. 62144 V	
1-(Cluss 148)	E-W.C. 62145 V	
	E-W.O. 62153 V	
1- Closs TuBI	E-W.O. 62154 V	
		_ 0
		M 10-10-06
Scope of Services The agreement of Acuren Group Inc. to per	eform services extends only to those services provided for in writing. Under no circumstan	nces shall such services extend beyond the performance of the requested services. It is expressly understood
representations or warranties. Acuren Gra	up Inc. is not assuming any responsibilities of the owner/operator and the owner/operator	tation and assumptions supplied by the owner/operator and are not intended nor can they be construed as retains complete responsibility for the engineering, manufacture, repair and use decisions as a result of the
Standard of Care	ren Group Inc. In no event shall Acuren Group Inc.'s liability in respect of the services ref	errea to nevern exceed the amount pad for such services. ces by others performing such services in the same or similar locality. No other warranty, expressed or
In performing the services provided, Active implied, is made or intended by Activen Gr		ces by omers performing such services in me sume or sommar account. For our contention, expressions
SIGNATURES		
CLIENT REPRESENTATIVE	Mother MURDOCH Millatter	-/ Missifella DTR# E63375
TECHNICIAN (SIGNATURE):	SIGN	REPORT
NAME (PRINT):	N.K= John Jan	REVIEWED BY: NAME INITIALS
_	and the second s	CHNICIAN
	CGSB LEVEL SNT LEVEL CGSB LEVEL CGSB REG. NO	SNT LEVEL

5.0 PARTS LIST

HIGH GEAR CROSSTUBES

14 4 AN6-36A ✓ 15 6 MS21042L6 16 18 AN960JD616 20 2 * D2940-1 21 4 * D3595-063-530 22 4 * MS21920-28 23 4 AN6-40A 24 2 AN6-41A 25 6 MS21042L6 26 18 AN960JD616 30 1 * D2896-1 31 2 * D2856-600-1009 32 2 * D3595-063-570 33 4 * MS21920-28 34 2 * MS21920-30 35 4 AN6-40A 36 2 AN6-41A	CROSSTUBE INSTALLATION, 204/205/210/212/214/412, UH-1H, UH-1A/B/E/F/L/P, TH-1F/L, HH-1K HIGH FWD CROSSTUBE INSTALLATION.
X D412-664-203 1 1 2 1 3 1 10 2 11 4 12 4 13 4 14 4 15 6 16 18 20 2 21 4 4 * MS21920-25 13 4 4 AN6-35A AN6-36A A 16 18 AN960JD616 20 2 21 4 4 * D3595-063-530 22 4 4 * N821920-28 23 4 4 AN6-40A 24 2 25 6 MS21042L6 26 18 AN960JD616 30 1 31 2 32 * D2856-600-1009 32 2 33 4 4 MS21920-	CDOSSTURE INSTALL ATION
1 1 D212-664-141 2 1 D212-664-241 3 1 D412-664-243 10 2 * D2893-1 11 4 * D3595-063-450 12 4 * MS21920-25 13 4 AN6-35A AN6-35A 14 4 AN6-36A AN6-36A 15 6 MS21042L6 16 18 AN960JD616 20 2 * D2940-1 21 4 * D3595-063-530 22 4 * MS21920-28 23 4 AN6-40A 24 2 AN6-41A 25 6 MS21042L6 26 18 AN960JD616 30 1 * D2896-1 31 2 * D2856-600-1009 32 3 4 * MS21920-28 33 4 * MS21920-28 34 4 AN6-40A 36 2 AN6-41A	204/205/210/212/214, UH-1H, UH-1A/B/E/F/L/P, TH-1F/L, HH-1K HIGH AFT
2 1 D212-664-241 3 1 D412-664-243 10 2 * D2893-1 11 4 * D3595-063-450 12 4 * MS21920-25 13 4 AN6-35A 14 4 AN6-36A 15 6 MS21042L6 16 18 AN960JD616 20 2 * D2940-1 21 4 * D3595-063-530 22 4 * MS21920-28 23 4 AN6-40A 24 2 AN6-41A 25 6 MS21042L6 26 18 AN960JD616 30 1 * D2896-1 31 2 * D2856-600-1009 32 3 * MS21920-28 33 4 * MS21920-28 34 4 * MS21920-28 34 5 * D2856-600-1009 32 5 * D3595-063-570 33 4 * MS21920-28 34 7 * MS21920-30 35 4 AN6-40A 36 2 AN6-41A	CROSSTUBE INSTALLATION, 412 HIGH AFT
3	CROSSTUBE ASSEMBLY, 204/205/210/212/214/412, UH-1H, UH-1A/B/E/F/L/P, TH-1F/L, HH-1K HIGH FWD
10 2 * D2893-1 11 4 * D3595-063-450 12 4 * MS21920-25 13 4 AN6-35A 14 4 AN6-36A 15 6 MS21042L6 16 18 AN960JD616 20 2 * D2940-1 21 4 * D3595-063-530 22 4 * MS21920-28 23 4 AN6-40A 24 2 AN6-41A 25 6 MS21042L6 26 18 AN960JD616 30 1 * D2896-1 31 2 * D2856-600-1009 32 3 4 * MS21920-28 33 4 * MS21920-28 34 3 4 * MS21920-28 35 4 AN6-40A 36 2 AN6-41A	CROSSTUBE ASSEMBLY, 204/205/210/212/214, UH-1H, UH-1A/B/E/F/L/P, TH-1F/L, HH-1K HIGH AFT
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14 4 AN6-36A ✓ 15 6 MS21042L6 16 18 AN960JD616 20 2 * D2940-1 21 4 * D3595-063-530 22 4 * MS21920-28 23 4 AN6-40A 24 2 AN6-41A 25 6 MS21042L6 26 18 AN960JD616 30 1 * D2896-1 31 2 * D2856-600-1009 32 2 * D3595-063-570 33 4 * MS21920-28 34 2 * MS21920-30 35 4 AN6-40A 36 2 AN6-41A	
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30	NUT (OR MS21042-6)
31 2 * D2856-600-1009 32 2 * D3595-063-570 33 4 * MS21920-28 34 2 * MS21920-30 35 4 AN6-40A 36 2 AN6-41A	WASHER
31 2 * D2856-600-1009 32 2 * D3595-063-570 33 4 * MS21920-28 34 2 * MS21920-30 35 4 AN6-40A 36 2 AN6-41A	SUPPORT
32 2 * D3595-063-570 33 4 * MS21920-28 34 2 * MS21920-30 35 4 AN6-40A 36 2 AN6-41A	ABRASION STRIP
33 4 * MS21920-28 34 2 * MS21920-30 35 4 AN6-40A 36 2 AN6-41A	RUBBER CUSHION
34 2 * MS21920-30 35 4 AN6-40A 36 2 AN6-41A	CLAMP
35 4 AN6-40A 36 2 AN6-41A	CLAMP (OR MS21042-32)
36 2 AN6-41A	BOLT
	BOLT
37 6 MS21042L6	
38 18 AN960JD616	I NUT (OR MS21042-6)
39 2 * D3189-1	NUT (OR MS21042-6) WASHER
50 1 1 D3428-1 7	NUT (OR MS21042-6) WASHER CHAFING SHIELD

^{*}REFERENCE ONLY. PARTS ARE INCLUDED IN D212-664-141/-241 OR D412-664-243 ASSEMBLIES ABOVE NOTE: KITS INCLUDE EXTRA HARDWARE FOR COMPATIBILITY WITH BOTH DART AND BELL/AA SKIDTUBES.

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Revision: **F**

Date: 08.09.05